



Duke Energy 1201 Main Street Capital Center Building Suite 1180 Columbia, SC 29201

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November 28, 2016

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd Chief Clerk/Administrator Public Service Commission of South Carolina 101 Executive Center Drive, Suite 100 Columbia, South Carolina 29210

Re: Duke Energy Progress, LLC – Monthly Fuel Report Docket No. 2006-176-E

Dear Mrs. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's ("DEP") Monthly Fuel Report in Docket No. 2006-176-E for the month of October 2016.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

Rebecu Din

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff

Mr. Jeffrey M. Nelson, Office of Regulatory Staff

Ms. Shannon Bowyer Hudson, Office of Regulatory Staff

Ms. Nanette Edwards, Office of Regulatory Staff

Michael Seaman-Huynh, Office of Regulatory Staff

Ms. Heather Shirley Smith, Duke Energy

Mr. Scott Elliott, Elliott & Elliott, P.A.

Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC

Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress Summary of Monthly Fuel Report

Schedule 1

1 Fuel and Fuel-related Costs excluding DERP incremental costs \$ 110,975,0	
)86
MWH sales: 4,805,5	5 80
2 Total System Sales 297,3	
3 Less intersystem sales	
4,508,2	268
4 Total sales less intersystem sales	
5 Total fuel and fuel-related costs (¢/KWH) 2.46	216
5 Total fuel and fuel-related costs (¢/KWH) 2.46 (Line 1/Line 4)	<u> </u>
(Line 1/Line 4)	
6 Current fuel & fuel-related cost component (¢/KWH) 2.34	431
(per Schedule 4)	<u> </u>
(poi concadio i)	
Ganaration Mix (MWH):	
Generation Mix (MWH):	
Fossil (By Primary Fuel Type):	
7 Coal 933,3	357
,	264
9 Natural Gas - Combustion Turbine 386,3	
10 Natural Gas - Combined Cycle 774,4	
11 Total Fossil 2,099,3	391
12 Nuclear 1,976,1	158
13 Hydro - Conventional 13,1	135
10,1	
14 Solar Distributed Generation 13,3	349
15 Total MWH generation 4,102,0)33

Note: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress Details of Fuel and Fuel-Related Costs

Description		october 2016
Fuel and Fuel-Related Costs:		
Steam Generation - Account 501		
0501110 coal consumed - steam		29,892,613
0501310 fuel oil consumed - steam		603,287
Total Steam Generation - Account 501		30,495,900
Nuclear Generation - Account 518		
0518100 burnup of owned fuel		13,033,578
0518600 - Disposal Cost		-
Total Nuclear Generation - Account 518		13,033,578
Other Generation - Account 547		
0547000 natural gas consumed - Combustion Turbine		17,183,287
0547000 natural gas consumed - Combined Cycle		26,373,310
0547200 fuel oil consumed		306,624
Total Other Generation - Account 547		43,863,221
Purchased Power and Net Interchange - Account 555		
Fuel and fuel-related component of purchased power		27,598,295
PURPA purchased power capacity		3,286,391
Total Purchased Power and Net Interchange - Account 555		30,884,686
Less fuel and fuel-related costs recovered through intersystem sales - Account 447		8,821,947
Total Costs Included in Base Fuel Component	\$	109,455,438
Environmental Costs		
0509030, 0509212, 0557451 emission allowance expense	\$	5,958
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense Emission Allowance Gains		1,640,246 -
Less reagents expense recovered through intersystem sales - Account 447		106,211
Less emissions expense recovered through intersystem sales - Account 447		20,345
Total Costs Included in Environmental Component		1,519,648
Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$</u>	110,975,086
DERP Incremental Costs		90,989
Total Fuel and Fuel-related Costs	\$	111,066,075

Notes: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS PURCHASED POWER AND INTERCHANGE SOUTH CAROLINA

OCTOBER 2016

Schedule 3, Purchases Page 1 of 2

Purchased Power	 Total	Ca	рас	ity	Non-capacity				
Marketers, Utilities, Other	 \$	mW		\$	mWh		Fuel \$	l	Non-fuel \$
DE Carolinas - Emergency	\$ 15,623	-		-	367	\$	9,530	\$	6,093
Broad River Energy, LLC.	2,583,900	811	\$	1,043,485	27,649		1,540,415		_
City of Fayetteville	312,172	220		302,450	-		9,722		-
Haywood EMC	29,650	7		29,650	-		-		-
NCEMC	3,481,980	566		2,618,878	18,644		863,102		-
PJM Interconnection, LLC.	185,411	-		-	6,220		185,411		-
Smurfit Stone Container Corp	35,184	-		-	1,102		35,184		-
Southern Company Services	3,833,053	150		540,540	102,635		3,292,513		-
DE Carolinas - Native Load Transfer	7,334,484	-		-	257,861		7,332,050		2,434
DE Carolinas - Native Load Transfer Benefit	290,925	-		-	-		290,925		-
Generation Imbalance	21,314				731		13,062		8,252
	\$ 18,123,696	1,754	\$	4,535,003	415,209	\$	13,571,914	\$	16,779
Act 236 PURPA Purchases									
Renewable Energy	14,418,801	-		-	200,579		14,418,801		-
Other Qualifying Facilities	2,893,971	-		-	41,190		2,893,971		-
	\$ 17,312,772		\$	<u> </u>	241,769	\$	17,312,772	\$	-
Total Purchased Power	\$ 35,436,468	1,754	\$	4,535,003	656,978	\$	30,884,686	\$	16,779

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS INTERSYSTEM SALES* SOUTH CAROLINA

OCTOBER 2016

Schedule 3, Sales Page 2 of 2

	 Total	Capacity			Non-capacity				
Sales	 \$	mW		\$	mWh		Fuel \$	Non	-fuel \$
Market Based:									
NCEMC Purchase Power Agreement	\$ 712,926	150	\$	652,500	1,824	\$	58,562	\$	1,864
PJM Interconnection, LLC.	4,090	-		-	285		10,692		(6,602)
Other:									
DE Carolinas - Native Load Transfer Benefit	392,399	-		-	-		392,399		-
DE Carolinas - Native Load Transfer	9,047,841	-		-	295,167		8,486,785		561,056
Generation Imbalance	78	-		-	36		65		13
Total Intersystem Sales	\$ 10,157,334	150	\$	652,500	297,312	\$	8,948,503	\$	556,331

^{*} Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress Over / (Under) Recovery of Fuel Costs October 2016

Line No.			Total Residential	General Service Non-Demand	Demand	Lighting	Total
1	Actual System kWh sales	Input					4,508,267,972
2	DERP Net Metered kWh generation	Input					17,475
3	Adjusted System kWh sales	L1 + L2				_	4,508,285,447
4	Actual S.C. Retail kWh sales	Input	132,896,114	22,196,322	318,384,989	7,647,207	481,124,632
5	DERP Net Metered kWh generation	Input	14,721	2,754	-		17,475
6	Adjusted S.C. Retail kWh sales	L4 + L5	132,910,835	22,199,076	318,384,989	7,647,207	481,142,107
7	Actual S.C. Demand units (kw)	L32 / 31b *100			610,400		
Base fuel o	component of recovery - non-capacity						
8	Incurred System base fuel - non-capacity expense	Input					\$106,169,044
9	Eliminate avoided fuel benefit of S.C. net metering	Input					\$575
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9				-	\$106,169,619
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					2.355
10	S.C. Dotail partian of adjusted insurred system eveness	L6 * L11 / 100	\$3,130,035	\$522,786	\$7,497,931	\$180,091	\$11,330,843
12	S.C. Retail portion of adjusted incurred system expense Assign 100 % of Avoided Fuel Benefit of S.C net metering		\$3,130,035 (\$339)		\$7,497,931 (\$204)	\$160,091 \$0	\$11,330,643 (\$575)
13 14	S.C. Retail portion of incurred system expense	Input L12 + L13	\$3,129,696	\$522,753	\$7,497,727	\$180,091	\$11,330,268
14	3.C. Retail portion of incurred system expense	L12 + L13	φ3,127,070	Ψ322,733	\$1,471,121	\$100,071	\$11,330,200
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.228	2.229	2.229	2.229	2.229
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$2,961,033	\$494,756	\$7,096,801	\$170,456	\$10,723,046
17	DERP NEM incentive - fuel component	Input	(\$80)	(\$8)	(\$48)	\$0	(\$136)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$2,960,953	\$494,748	\$7,096,753	\$170,456	\$10,722,910
19	S.C. base fuel - non-capacity over/(under) recovery	L18 - L14	(\$168,744)	(\$28,005)	(\$400,974)	(\$9,635)	(\$607,358)
20	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
21	Total S.C. base fuel - non-capacity over/(under) recovery	L19 + L20	(\$168,744)		(\$400,974)		(\$607,358)
D							
	component of recovery - capacity	100/14*100	0.155	0.000			
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.155	0.090	20		
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L9 * 100	¢207 E40	¢20.002	20 ¢124.174		¢250.724
23	Incurred S.C. base fuel - capacity expense	Input	\$206,548 0.181	\$20,002 0.128	\$124,174		\$350,724
24a	Billed base fuel - capacity rates by class (¢/kWh) Billed base fuel - capacity rate (¢/kW)	Input	0.161	0.128	30		
24b 25	Billed S.C. base fuel - capacity revenue	Input L24a * L4 /100	\$239,941	\$28,411		\$0	\$451,471
26	S.C. base fuel - capacity over/(under) recovery	L25 - L23	\$33,393	\$8,409	\$58,945	\$0 \$0	\$100,747
27	Adjustment	Input	\$35,3 <i>7</i> 3	\$0,409	\$30,743	\$0 \$0	\$100,747
28	Total S.C. base fuel - capacity over/(under) recovery	L26 + L27	\$33,393	\$8,409	\$58,945	\$0 \$0	\$100,747
	ental component of recovery						
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.072	0.042	0		
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100	405 500	#0.040	9		41/0 177
30	Incurred S.C. environmental expense	Input	\$95,509	\$9,249	\$57,419		\$162,177
31a	Billed environmental rates by class (¢/kWh)	Input	0.042	0.031	,		
31b	Billed environmental rate (¢/kW)	Input	ቀ ርር ዓ74	¢/ 001	6		¢00.077
32	Billed S.C. environmental revenue	L31a * L4 /100	\$55,371 (\$40,129)	\$6,881 (\$2,269)		¢Ω	\$98,876 (\$62,201)
33 34	S.C. environmental over/(under) recovery	L32 - L30	(\$40,138) \$0	(\$2,368) \$0	\$ (20,795) \$0	\$0 \$0	(\$63,301) \$0
34 35	Adjustment Total S.C. environmental over/(under) recovery	Input L33 + L34	(\$40,138)				(\$63,301)
33	Total 3.0. Grivironinichtal Over/funder/ 1660very	LJJ T LJ4	(440, 130)	(ψΖ,300)	(\$ZU,17J)	φυ	(ΨUJ ₁ JUT)
36	Total over / (under) recovery	L21 + L28 + L35	(\$175,489)	(\$21,964)	(\$362,824)	(\$9,635)	(\$569,912)

Over / (Under) Recovery of Fuel Costs October 2016

Year 2016-2017

			General Service			2	Prior Period	
Cumulative over / (under) recovery	Cumulative	Total Residential	Non-Demand	Demand	Lighting	Subtotal	Adjustments	Total
Balance ending February 2016	(8,178,450)							
March 2016 - actual	(5,113,937)	\$1,257,169	\$149,823	\$1,614,366	\$43,155	\$3,064,513	\$0	\$3,064,513
_/2 April 2016 - actual	(2,862,055)	\$579,097	\$91,208	\$1,546,143	\$35,434	\$2,251,882	\$0	\$2,251,882
May 2016 - actual	(2,055,487)	\$166,326	\$33,470	\$597,607	\$9,165	\$806,568	\$0	\$806,568
_/2 June 2016 - actual	(1,637,768)	\$134,334	\$21,348	\$171,533	\$18,077	\$345,292	\$72,427	\$417,719
July 2016 - actual	(4,666,718)	(\$1,099,935)	(\$153,840)	(\$1,737,737)	(\$37,438)	(\$3,028,950)	\$0	(\$3,028,950)
August 2016 - actual	(6,588,776)	(\$647,989)	(\$90,105)	(\$1,162,202)	(\$21,762)	(\$1,922,058)	\$0	(\$1,922,058)
September 2016 - actual	(6,774,119)	(\$78,301)	(\$4,082)	(\$101,162)	(\$1,798)	(\$185,343)	\$0	(\$185,343)
October 2016 - actual	(7,344,031)	(\$175,489)	(\$21,964)	(\$362,824)	(\$9,635)	(\$569,912)	\$0	(\$569,912)
_/3 November 2016 - forecast	(6,603,436)	\$332,604	\$26,539	\$372,108	\$9,344	\$740,595	\$0	\$740,595
_/3 December 2016 - forecast	(6,452,612)	\$129,464	(\$7,043)	\$28,502	(\$99)	\$150,824	\$0	\$150,824
_/3 January 2017 - forecast	(6,539,073)	\$58,959	(\$14,214)	(\$129,110)	(\$2,096)	(\$86,461)	\$0	(\$86,461)
_/3 February 2017 - forecast	(6,518,138)	\$58,164	(\$7,964)	(\$29,709)	\$444	\$20,935	\$0	\$20,935
_/3 March 2017 - forecast	(7,566,734)	(\$321,664)	(\$44,048)	(\$665,738)	(\$17,146)	(\$1,048,596)	\$0	(\$1,048,596)
_/3 April 2017 - forecast	(7,521,995)	(\$71,846)	\$3,504	\$110,330	\$2,751	\$44,739	\$0	\$44,739
_/3 May 2017 - forecast	(6,610,004)	\$253,800	\$46,260	\$597,089	\$14,842	\$911,991	\$0	\$911,991
_/3 June 2017 - forecast	(6,587,866)	(\$22,409)	(\$1,941)	\$45,804	\$684	\$22,138	\$0	\$22,138

Line No.			Residential	Commercial	Industrial	Total
Distributed	Energy Resource Program component of recovery: incremental	l costs			_	
37	Incurred S.C. DERP incremental expense	Input	\$53,585	\$23,527	\$13,877	\$90,989
38	Billed S.C. DERP incremental rates by account (\$/account)	Input	0.35	0.70	62.56	
39	Billed S.C. DERP incremental revenue	Input	\$47,906	\$22,458	\$16,881	\$87,245
40	S.C. DERP incremental over/(under) recovery	L39 - L37	(\$5,679)	(\$1,069)	\$3,004	(\$3,744)
41	Adjustment	Input	\$0	\$0	\$0	\$0
42	Total S.C. DERP incremental over/(under) recovery	L40 + L41	(\$5,679)	(\$1,069)	\$3,004	(\$3,744)

Year 2016-2017

					Prior Period	
Cumulative	Residential	Commercial	Industrial	Subtotal	Adjustments	Total
(409,036)						
(332,983)	\$47,587	\$24,676	\$3,790	\$76,053	\$0	\$76,053
(239,880)	\$57,498	\$29,093	\$6,512	\$93,103	\$0	\$93,103
(230,645)	\$8,264	\$7,454	(\$6,483)	\$9,235	\$0	\$9,235
(363,127)	(\$75,641)	(\$29,326)	(\$27,515)	(\$132,482)	\$0	(\$132,482)
(227,737)	\$76,605	\$35,021	\$23,764	\$135,390	\$0	\$135,390
(230,217)	(\$5,161)	(\$836)	\$3,517	(\$2,480)	\$0	(\$2,480)
(236,229)	(\$6,705)	(\$1,534)	\$2,227	(\$6,012)	\$0	(\$6,012)
(239,973)	(\$5,679)	(\$1,069)	\$3,004	(\$3,744)	\$0	(\$3,744)
(245,932)	(\$5,855)	(\$2,639)	\$2,535	(\$5,959)	\$0	(\$5,959)
(261,558)	(\$11,565)	(\$5,098)	\$1,037	(\$15,626)	\$0	(\$15,626)
(288,799)	(\$18,310)	(\$8,106)	(\$825)	(\$27,241)	\$0	(\$27,241)
(323,612)	(\$22,743)	(\$10,080)	(\$1,990)	(\$34,813)	\$0	(\$34,813)
(419,842)	(\$58,822)	(\$25,969)	(\$11,439)	(\$96,230)	\$0	(\$96,230)
(528,376)	(\$66,107)	(\$29,157)	(\$13,270)	(\$108,534)	\$0	(\$108,534)
(646,361)	(\$71,670)	(\$31,571)	(\$14,744)	(\$117,985)	\$0	(\$117,985)
(773,725)	(\$77,181)	(\$33,994)	(\$16,189)	(\$127,364)	\$0	(\$127,364)
	(409,036) (332,983) (239,880) (230,645) (363,127) (227,737) (230,217) (236,229) (239,973) (245,932) (261,558) (288,799) (323,612) (419,842) (528,376) (646,361)	(409,036) (332,983) \$47,587 (239,880) \$57,498 (230,645) \$8,264 (363,127) (\$75,641) (227,737) \$76,605 (230,217) (\$5,161) (236,229) (\$6,705) (239,973) (\$5,679) (245,932) (\$5,855) (261,558) (\$11,565) (288,799) (\$18,310) (323,612) (\$58,822) (528,376) (\$66,107) (646,361) (\$71,670)	(409,036) (332,983) \$47,587 \$24,676 (239,880) \$57,498 \$29,093 (230,645) \$8,264 \$7,454 (363,127) (\$75,641) (\$29,326) (227,737) \$76,605 \$35,021 (230,217) (\$5,161) (\$836) (236,229) (\$6,705) (\$1,534) (239,973) (\$5,679) (\$1,069) (245,932) (\$5,855) (\$2,639) (261,558) (\$11,565) (\$5,098) (288,799) (\$18,310) (\$8,106) (323,612) (\$22,743) (\$10,080) (419,842) (\$58,822) (\$25,969) (528,376) (\$66,107) (\$29,157) (646,361) (\$71,670) (\$31,571)	(409,036) (332,983) \$47,587 \$24,676 \$3,790 (239,880) \$57,498 \$29,093 \$6,512 (230,645) \$8,264 \$7,454 (\$6,483) (363,127) (\$75,641) (\$29,326) (\$27,515) (227,737) \$76,605 \$35,021 \$23,764 (230,217) (\$5,161) (\$836) \$3,517 (236,229) (\$6,705) (\$1,534) \$2,227 (239,973) (\$5,679) (\$1,069) \$3,004 (245,932) (\$5,855) (\$2,639) \$2,535 (261,558) (\$11,565) (\$5,098) \$1,037 (288,799) (\$18,310) (\$8,106) (\$825) (323,612) (\$22,743) (\$10,080) (\$1,990) (419,842) (\$58,822) (\$25,969) (\$11,439) (528,376) (\$66,107) (\$29,157) (\$13,270) (646,361) (\$71,670) (\$31,571) (\$14,744)	(409,036) (332,983) \$47,587 \$24,676 \$3,790 \$76,053 (239,880) \$57,498 \$29,093 \$6,512 \$93,103 (230,645) \$8,264 \$7,454 (\$6,483) \$9,235 (363,127) (\$75,641) (\$29,326) (\$27,515) (\$132,482) (227,737) \$76,605 \$35,021 \$23,764 \$135,390 (230,217) (\$5,161) (\$836) \$3,517 (\$2,480) (236,229) (\$6,705) (\$1,534) \$2,227 (\$6,012) (239,973) (\$5,679) (\$1,069) \$3,004 (\$3,744) (245,932) (\$5,855) (\$2,639) \$2,535 (\$5,959) (261,558) (\$11,565) (\$5,098) \$1,037 (\$15,626) (288,799) (\$18,310) (\$8,106) (\$825) (\$27,241) (323,612) (\$22,743) (\$10,080) (\$1,990) (\$34,813) (419,842) (\$58,822) (\$25,969) (\$11,439) (\$96,230) (528,376) (\$66,107) (\$29,157) (\$13,270) (\$108,534) (646,361) <t< td=""><td>Cumulative Residential Commercial Industrial Subtotal Adjustments (409,036) (332,983) \$47,587 \$24,676 \$3,790 \$76,053 \$0 (239,880) \$57,498 \$29,093 \$6,512 \$93,103 \$0 (230,645) \$8,264 \$7,454 \$6,483 \$9,235 \$0 (363,127) \$75,641 \$29,326 \$27,515 \$132,482 \$0 (227,737) \$76,605 \$35,021 \$23,764 \$135,390 \$0 (230,217) \$5,161 \$836 \$3,517 \$2,480 \$0 (236,229) \$6,705 \$1,534 \$2,227 \$6,012 \$0 (239,973) \$5,679 \$1,069 \$3,004 \$3,744 \$0 (245,932) \$5,855 \$2,639 \$2,535 \$5,959 \$0 (261,558) \$11,565 \$5,098 \$1,037 \$15,626 \$0 (288,799) \$18,310 \$8,108 \$1,990 \$34,813 \$0 (419,842) <td< td=""></td<></td></t<>	Cumulative Residential Commercial Industrial Subtotal Adjustments (409,036) (332,983) \$47,587 \$24,676 \$3,790 \$76,053 \$0 (239,880) \$57,498 \$29,093 \$6,512 \$93,103 \$0 (230,645) \$8,264 \$7,454 \$6,483 \$9,235 \$0 (363,127) \$75,641 \$29,326 \$27,515 \$132,482 \$0 (227,737) \$76,605 \$35,021 \$23,764 \$135,390 \$0 (230,217) \$5,161 \$836 \$3,517 \$2,480 \$0 (236,229) \$6,705 \$1,534 \$2,227 \$6,012 \$0 (239,973) \$5,679 \$1,069 \$3,004 \$3,744 \$0 (245,932) \$5,855 \$2,639 \$2,535 \$5,959 \$0 (261,558) \$11,565 \$5,098 \$1,037 \$15,626 \$0 (288,799) \$18,310 \$8,108 \$1,990 \$34,813 \$0 (419,842) <td< td=""></td<>

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.246 and RECD 5% discount.

_/2 Includes prior period adjustments.

_/3 Forecast amounts based on low end of range of expected fuel rates.

Duke Energy Progress Fuel and Fuel Related Cost Report October 2016

Description	Weatherspoon CT	Lee CC	Sutton CC/CT	Robinson Nuclear	Asheville Steam	Asheville CT	Roxboro Steam	Mayo Steam
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	\$2,754,621	-	\$13,702,990	\$14,411,328
Oil	-	-	261	20,049	-	-	382,331	117,282
Gas - CC	-	7,637,381	13,874,686	-	-	-	-	-
Gas - CT	24	-	-	-	-	211,112	-	-
Total	\$24	\$7,637,381	\$13,874,947	\$20,049	\$2,754,621	\$211,112	\$14,085,321	\$14,528,610
Average Cost of Evel Durchased (4/MPTH	Λ.							
Average Cost of Fuel Purchased (¢/MBTU Coal	-	_	-	-	316.05	_	316.81	300.11
Oil	_	_	-	1,948.40	-	_	1,007.30	1,010.96
Gas - CC	_	529.44	483.92	-	_	_	-	-
Gas - CT	_	-	-	-	_	490.13	-	-
Weighted Average	-	529.44	483.93	1,948.40	316.05	490.13	322.81	301.83
Cost of Fuel Burned (\$) Coal	_	_	_	_	\$2,325,330		\$24,814,306	\$2,752,977
Oil - CC	-	8,935	7,867	-	φ2,323,330	-	\$24,614,300 -	\$2,732,977 -
Oil - CC Oil - Steam/CT	- 87,246	-	3,124	-	- 18,875	-	369,093	- 215,319
Gas - CC	07,240	7,637,381	13,874,686	_	10,075	_	509,095	213,319
Gas - CC Gas - CT	24	7,037,361	13,074,000	_	- -	211,112	_	_
Nuclear	-	_	-	3,346,165	-	-	-	_
Total	\$87,269	\$7,646,316	\$13,885,676	\$3,346,165	\$2,344,204	\$211,112	\$25,183,399	\$2,968,296
	. ,	. , ,	. , ,	. , ,		,	. , ,	. , ,
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	310.31	-	315.74	342.61
Oil - CC	-	1,801.21	1,947.55	-	-	-	-	-
Oil - Steam/CT	1,549.33	-	2,021.61	-	1,420.53	-	1,003.18	1,004.88
Gas - CC	-	529.44	483.92	-	-	-	-	-
Gas - CT	-	-	-	-	-	490.13	-	-
Nuclear	4.540.75	-	- 404.04	60.49	- 240.00	- 400.40	- 240.04	- 250.04
Weighted Average	1,549.75	529.88	484.21	60.49	312.28	490.13	318.94	359.81
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	3.58	-	3.13	3.68
Oil - CC	-	-	22.95	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	16.16	-	9.78	10.80
Gas - CC	-	3.96	3.42	-	-	-	-	-
Gas - CT	-	-	-	-	-	6.18	-	-
Nuclear	-	-	-	0.67	-	-	-	-
Weighted Average	-	3.98	3.42	0.67	3.60	6.18	3.16	3.87
Burned MBTU's								
Coal	_	_	-	-	749,352	_	7,859,086	803,524
Oil - CC	_	496	404	-	-	_	-	-
Oil - Steam/CT	5,631	-	155	_	1,329	_	36,792	21,427
Gas - CC	· -	1,442,539	2,867,146	-	-	-	-	, -
Gas - CT	-	-	- -	-	-	43,073	-	-
Nuclear	-	-	-	5,531,671	-	-	-	-
Total	5,631	1,443,035	2,867,704.43	5,531,671	750,681	43,073.00	7,895,879	824,952
N (2 () () () ()								
Net Generation (mWh)					04.000		702.020	74.704
Coal	-	- (000)	-	-	64,933	-	793,630	74,794
Oil - CC Oil - Steam/CT	- (7)	(889)	34 (32)	-	- 117	-	- 3,772	- 1,994
Gas - CC	(7)	- 192,927	405,876	-	-	-	3,772	1,994
Gas - CT	_	132,321		_	-	3,417	_	_
Nuclear	_	_	_	496,234	_	-	_	_
Hydro (Total System)				430,234				
Solar (Total System)								
Total	(7)	192,038	405,878	496,234	65,050	3,417	797,402	76,788
Cost of Reagents Consumed (\$)							6007.054	640.000
Ammonia	-	-	-	-	- 55 700	-	\$237,054	\$10,830
Limestone	-	-	-	-	55,709	-	837,178	98,588
Re-emission Chemical	-	-	-	-	-	-	-	-
Sorbents	-	-	-	-	21,044 61,491	-	276,780	38,550
Urea Total	<u> </u>	<u> </u>	<u> </u>	<u> </u>	61,491 138,244	<u> </u>	1,351,013	147,968
	Notes:	-	-	-	130,244	-	1,551,015	147,300

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Fuel cost information on this report does not reflect intercompany sharing of fuel-related merger savings between Duke Energy Carolinas and Duke Energy Progress.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

Duke Energy Progress Fuel and Fuel Related Cost Report October 2016

			Smith Energy						
	Brunswick	Blewett	Wayne County	Darlington	Complex	Harris	Current	Total 12 ME	
Description	Nuclear	СТ	СТ	СТ	CC/CT	Nuclear	Month	October 2016	
Cost of Fuel Purchased (\$)							•		
Coal	-	-	-	-	-	-	\$30,868,939	\$338,754,003	
Oil Gas - CC	19,118	-	-	-	4 964 944	59,135	598,176	18,179,028	
Gas - CC Gas - CT	-	-	- 6,219,795	- 85,074	4,861,244 10,667,282	-	26,373,310 17,183,287	528,514,023 146,559,626	
Total	19,118		\$6,219,795	\$85,074	\$15,528,526	59,135	\$75,023,712	\$1,032,006,680	
, otal	10,110		ψο,Σ.ο,οο	φοσίοι	ψ.0,020,020	33,133	ψ. 0,020,1.12	ψ1,002,000,000	
Average Cost of Fuel Purchased (¢/MBTU									
Coal	-	-	-	-	-	-	308.72	320.74	
Oil	1,790.07	-	-	-	-	1,912.52	1,092.64	1,066.68	
Gas - CC	-	-	-	-	395.19	-	476.07	390.11	
Gas - CT	-	-	376.20	936.32	398.94	-	392.37	347.37	
Weighted Average	1,790.07	-	376.20	936.32	397.76	1,912.52	375.63	362.12	
Cost of Eurl Burned (\$)									
Cost of Fuel Burned (\$) Coal	_	_	_	_	_	-	\$29,892,613	\$392,541,571	
Oil - CC	_	_	_	_	14,439	_	31,241	443,368	
Oil - Steam/CT	_	8,202	5,025	161,468	10,318	-	878,669	16,345,855	
Gas - CC	-	-	-	-	4,861,244	-	26,373,310	528,514,023	
Gas - CT	-	-	6,219,795	85,074	10,667,282	-	17,183,287	146,559,626	
Nuclear	8,661,338	-	-	-	-	1,026,074	13,033,578	193,487,161	
Total	\$8,661,338	\$8,202	\$6,224,821	\$246,542	\$15,553,283	\$1,026,074	\$87,392,698	\$1,277,891,603	
Average Cost of Fuel Burned (¢/MBTU)									
Coal	-	-	-	-	-	-	317.60	327.17	
Oil - CC	-	-	-	-	1,677.29	-	1,774.20	2,063.12	
Oil - Steam/CT Gas - CC	-	1,667.60	1,799.69	1,771.64	1,677.23 395.19	-	1,158.67 476.07	1,336.61 390.11	
Gas - CC Gas - CT	_	-	376.20	936.32	398.94	_	392.37	347.37	
Nuclear	62.95	-	-	-	-	67.75	62.65	63.54	
Weighted Average	62.95	1,667.60	376.44	1,354.62	398.24	67.75	217.32	211.77	
Average Cost of Generation (¢/kWh)									
Coal	-	-	-	-	-	-	3.20	3.47	
Oil - CC	-	-	-	-	19.78	-	-	47.30	
Oil - Steam/CT	-	-	19.99	120.86	19.11	-	14.53	17.68	
Gas - CC	-	-	-	-	2.77	-	3.41	2.79	
Gas - CT	- 0.04	-	4.18	19.10	4.57	- 0.75	4.45	3.85	
Nuclear Weighted Average	0.64	<u> </u>	4.18	42.58	3.80	0.75 0.75	0.66 2.13	0.66 1.99	
Weighted Average	0.04	-	4.10	42.30	3.00	0.73	2.13	1.99	
Burned MBTU's									
Coal	-	-	-	-	-	-	9,411,963	119,980,785	
Oil - CC	-	-	-	-	861	-	1,761	21,490	
Oil - Steam/CT	-	492	279	9,114	615	-	75,834	1,222,936	
Gas - CC	-	-	-	-	1,230,102	-	5,539,787	135,477,078	
Gas - CT	-	-	1,653,305	9,086	2,673,900	-	4,379,364	42,190,639	
Nuclear	13,758,626	-	-	-	-	1,514,407	20,804,703	304,529,506	
Total	13,758,626	492	1,653,584	18,200	3,905,478	1,514,407	40,213,412	603,422,435	
Not Congration (mIA/h)									
Net Generation (mWh) Coal	_	_	_	_	_	_	933,357	11,311,263	
Oil - CC	_	_	_	-	73	-	(782)	937	
Oil - Steam/CT	-	(11)	25	134	54	-	6,046	92,438	
Gas - CC	-	-	-	-	175,599	_	774,402	18,954,694	
Gas - CT	-	-	148,906	445	233,600	-	386,368	3,811,001	
Nuclear	1,343,847	-	-	-	-	136,077	1,976,158	29,294,608	
Hydro (Total System)							13,135	599,572	
Solar (Total System)							13,349	159,196	
Total	1,343,847	(11)	148,931	579	409,326	136,077	4,102,033	64,223,709	
Cost of Reagents Consumed (\$)					# 0.004		#050.005	#0.405.700	
Ammonia	-	-	-	-	\$3,021	-	\$250,905	\$3,195,780	
Limestone Re-emission Chemical	-	-	-	- -	-	-	991,475 -	10,144,748 117,168	
Sorbents	- -	-	-	- -	-	-	336,374	3,680,947	
Urea	- -	-	-	-	-	-	61,491	999,253	
Total		-	-	-	3,021	-	1,640,246	18,137,896	
					•		,	. ,	

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report October 2016

Description	Weatherspoon	Lee	Sutton	Robinson	Asheville
Coal Data:					
Beginning balance	-	-	-	-	52,145
Tons received during period	-	-	-	-	34,365
Inventory adjustments	-	-	-	-	-
Tons burned during period	-	-	-	-	29,888
Ending balance	-	-	-	-	56,622
MBTUs per ton burned	-	-	-	-	25.07
Cost of ending inventory (\$/ton)	-	-	-	-	77.80
Oil Data:					
Beginning balance	657,974	-	3,185,418	78,040	3,090,582
Gallons received during period	-	-	-	7,458	-
Miscellaneous use and adjustments	(1,014)	-	-	0	(4,329)
Gallons burned during period	40,225	-	3,926	-	9,666
Ending balance	616,735	-	3,181,492	85,498	3,076,587
Cost of ending inventory (\$/gal)	2.17	-	2.80	2.89	1.95
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	1,367,285	2,772,825	-	38,195
MCF burned during period	-	1,367,285	2,772,825	-	38,195
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	-	17,244
Tons received during period	-	-	-	-	2,250
Inventory adjustments	-	-	-	-	-
Tons consumed during period	-	-	-	-	1,504
Ending balance	-	-	-	-	17,990
Cost of ending inventory (\$/ton)	-	-	-	-	35.81

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report October 2016

Description	Roxboro	Мауо	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	815,381	264,999	-	-	-
Tons received during period	169,383	188,786	-	-	-
Inventory adjustments	-	-	-	-	-
Tons burned during period	308,704	34,210	-	-	-
Ending balance	676,060	419,575	-	-	-
MBTUs per ton burned	25.46	23.49	-	-	-
Cost of ending inventory (\$/ton)	80.37	80.47	-	-	-
Oil Data:					
Beginning balance	448,967	279,602	168,829	810,339	11,859,135
Gallons received during period	275,046	84,063	7,740	-	-
Miscellaneous use and adjustments	(15,304)	(5,608)	-	-	-
Gallons burned during period	266,865	155,386	5,397	3,501	5,631
Ending balance	441,844	202,671	171,172	806,838	11,853,504
Cost of ending inventory (\$/gal)	1.38	1.39	2.89	2.34	2.48
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	1,584,417
MCF burned during period	-	-	-	-	1,584,417
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	54,458	19,804	-	-	-
Tons received during period	4,006	3,868	-	-	-
Inventory adjustments	-	-	-	-	-
Tons consumed during period	23,003	2,817	-	-	-
Ending balance	35,461	20,855	-	-	-
Cost of ending inventory (\$/ton)	33.00	32.92	-	-	-

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report October 2016

Description	Darlington	Smith Energy Complex	Harris	Current Month	Total 12 ME October 2016
Coal Data:					
Beginning balance	-	-	-	1,132,525	1,838,623
Tons received during period	-	-	-	392,534	4,188,785
Inventory adjustments	-	-	-	-	(95,406)
Tons burned during period	-	-	-	372,802	4,779,745
Ending balance	-	-	-	1,152,257	1,152,257
MBTUs per ton burned	-	-	-	25.25	25.10
Cost of ending inventory (\$/ton)	-	-	-	80.28	80.28
Oil Data:					
Beginning balance	10,155,711	7,866,300	289,891	38,890,788	35,732,155
Gallons received during period	-	-	22,409	396,716	12,349,759
Miscellaneous use and adjustments	-	-	-	(26,255)	(310,194)
Gallons burned during period	66,044	10,544	37,406	604,591	9,115,062
Ending balance	10,089,667	7,855,756	274,894	38,656,658	38,656,658
Cost of ending inventory (\$/gal)	2.44	2.35	2.89	2.41	2.41
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	8,824	3,774,775	-	9,546,321	171,821,475
MCF burned during period	8,824	3,774,775	-	9,546,321	171,821,475
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	91,506	97,247
Tons received during period	-	-	-	10,124	259,341
Inventory adjustments	-	-	-	-	11,405
Tons consumed during period	-	-	-	27,324	293,687
Ending balance	-	-	-	74,306	74,306
Cost of ending inventory (\$/ton)	-	-	-	33.66	33.66

DUKE ENERGY PROGRESS ANALYSIS OF COAL PURCHASED OCTOBER 2016

		-		
STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ASHEVILLE	SPOT	-	\$ -	-
	CONTRACT	34,365	2,649,164	77.09
	ADJUSTMENTS		105,457	
	TOTAL	34,365	2,754,621	80.16
MAYO	SPOT	-	-	-
	CONTRACT	188,786	14,294,409	75.72
	ADJUSTMENTS	-	116,919	-
	TOTAL	188,786	14,411,328	76.34
DOVEODO	CDOT	41	2.024	/0.5/
ROXBORO	SPOT	41	2,824	69.56
	CONTRACT ADJUSTMENTS	169,343	13,025,129	76.92
	TOTAL	1/0 202	675,038	80.90
	TOTAL	169,383	13,702,990	80.90
ALL PLANTS	SPOT	41	2,824	69.56
	CONTRACT ADJUSTMENTS	392,494 	29,968,702 897,413	76.35
	TOTAL	392,534	\$ 30,868,939	\$ 78.64

Schedule 8

DUKE ENERGY PROGRESS ANALYSIS OF COAL QUALITY RECEIVED OCTOBER 2016

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.63	8.94	12,681	2.20
MAYO	6.49	8.61	12,718	2.44
ROXBORO	6.46	8.24	12,768	2.23

DUKE ENERGY PROGRESS ANALYSIS OF OIL PURCHASED OCTOBER 2016

	BRU	JNSWICK		МАҮО	F	IARRIS
VENDOR	Selma	a Tank Farm	Greensboro Tank Farm		Selma Tank Farm	
SPOT/CONTRACT	C	Contract	Contract		(Contract
SULFUR CONTENT %		0		0		0
GALLONS RECEIVED		7,740		84,063		22,409
TOTAL DELIVERED COST	\$	19,118	\$	117,282	\$	59,135
DELIVERED COST/GALLON	\$	2.47	\$	1.40	\$	2.64
BTU/GALLON		138,000		138,000		138,000
	RO	BINSON	RO	DXBORO		
VENDOR	Selma	a Tank Farm	Greensb	ooro Tank Farm		
SPOT/CONTRACT	C	Contract	(Contract		
SULFUR CONTENT %		0		0		
GALLONS RECEIVED		7,458		275,046		
TOTAL DELIVERED COST	\$	20,049	\$	382,331		
DELIVERED COST/GALLON	\$	2.69	\$	1.39		
BTU/GALLON		138,000		138,000		

Note:

An adjustment of \$261 for the Sutton CC station is excluded.

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Duke Energy Progress Power Plant Performance Data Twelve Month Summary

November, 2015 - October, 2016 Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	7,213,927	938	87.55	87.79
Brunswick 2	8,098,953	932	98.93	99.44
Harris 1	7,770,630	928	95.33	93.29
Robinson 2	6,211,098	741	95.42	93.10

Twelve Month Summary November, 2015 through October, 2016 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,256,431	196	72.94	85.61
Lee Energy Complex	1B	1,362,090	195	79.48	94.58
Lee Energy Complex	1C	1,380,801	197	79.68	95.32
Lee Energy Complex	ST1	2,503,231	378	75.31	83.42
Lee Energy Complex	Block Total	6,502,553	967	76.56	88.72
Richmond County CC	7	1,094,909	172	72.45	80.84
Richmond County CC	8	1,078,135	170	72.08	80.42
Richmond County CC	ST4	1,233,646	169	83.03	80.81
Richmond County CC	9	1,345,873	193	79.41	89.37
Richmond County CC	10	1,344,433	193	79.32	88.63
Richmond County CC	ST5	1,752,210	248	80.32	85.15
Richmond County CC	Block Total	7,849,206	1,146	77.99	84.98
Sutton Energy Complex	1A	1,374,116	198	78.97	92.83
Sutton Energy Complex	1B	1,471,318	198	84.55	97.87
Sutton Energy Complex	ST1	1,758,438	265	75.47	95.35
Sutton Energy Complex	Block Total	4,603,872	662	79.24	95.13

Duke Energy Progress Power Plant Performance Data Twelve Month Summary

November, 2015 through October, 2016

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	1,935,806	735	29.99	86.48
Roxboro 3	2,096,237	694	34.39	83.56
Roxboro 4	2,173,304	703	35.17	91.35

Duke Energy Progress Power Plant Performance Data Twelve Month Summary November, 2015 through October, 2016

Baseload Steam Units

	Net			
Unit Name	Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Roxboro 2	2,778,615	672	47.08	87.11

Twelve Month Summary November, 2015 through October, 2016 Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville	1	683,507	190	40.90	81.12
Asheville	2	574,217	189	34.51	82.41
Roxboro	1	1,132,447	379	33.98	98.67

Twelve Month Summary November, 2015 through October, 2016 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	178,940	343	90.64
Blewett CT	-43	59	97.63
Darlington CT	99,073	808	92.56
Richmond County CT	3,122,886	838	88.75
Sutton CT	-530	67	92.68
Wayne County CT	439,986	903	92.14
Weatherspoon CT	257	143	96.39

Schedule 10 Page 7 of 7

Twelve Month Summary November, 2015 through October, 2016 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	91,882	27.0	72.98
Marshall	8,997	4.0	49.79
Tillery	207,046	84.0	98.18
Walters	291,647	113.0	86.01